

AVIATION ACCIDENT REPORTING, INVESTIGATION AND SITE MANAGEMENT PLAN

Approval Original signed on file
Organizational Unit Manager

GENERAL INFORMATION

The following records are generated by this procedure and should be maintained in accordance with CID 1440.7:

- Mishap checklist
- Mishap report

NOTE: If reporting an aircraft mishap, proceed to the Mishap Reporting Checklist, Paragraph D, on Page 4

A. General

This plan establishes specific responsibilities for individuals and local organizations at the time of an aircraft mishap. To maintain the rapid response capability of the notification system, only minimum time shall be expended on any one contact. The message is to be taken and acknowledged by a responsible individual, who represents the contact being notified. In the event of absence of any specific individual to be contacted, all authority and responsibility assigned by this plan will fall to his deputy or senior subordinate. This document is in compliance with NPR 8715.3, "NASA Safety Manual."

B. Crash-Rescue Emergencies

In accordance with Langley Air Force Base (LAFB) Operations Plan 32-1 (*Disaster Response Plan*); Support Agreement FB 4800-97069-104; and mutual aid agreements with local municipalities, LAFB will provide the same crash, fire, rescue and security services for NASA aircraft and crews as for DoD aircraft and crews, both on and off site. Medical provisions will include emergency treatment of aircrews at the LAFB Hospital. The USAF senior officer present, following fire suppression and rescue operations, will yield control of the crash site to the LaRC Aviation Safety Officer (ASO). In the absence of the ASO, the Assistant ASO or LaRC Emergency Preparedness Officer may assume control of the crash site. The senior LaRC Security Officer at the accident site may temporarily assume control until delegated personnel arrive at the location. In the event of an accident outside of NASA or LAFB property, USAF and LaRC personnel will cooperate with the appropriate local authorities.

C. Crash Site Management

Upon assuming control of the crash site from the LAFB senior officer present or controlling local authorities, the ASO or appropriate LaRC official will be responsible as Crash Site Manager for accomplishing the following priorities in the order given below:

1. Providing for immediate emergency medical assistance, as necessary
2. Ensuring the site is safe
3. Ensuring the site is preserved
4. Commencing the investigation

These responsibilities will continue until such time as exclusive control and security of the site is assumed by an investigative body official. In addition the Crash Site Manager shall keep LaRC management informed of the situation. Normally, this will be accomplished by communicating with the LaRC Research Services Director. A single point-of-contact (POC) shall be established to update LaRC management.

Complete mishap investigation kits are maintained by the ASO and Aircraft Services Branch. Small backpack kits are kept in the Aviation Safety locker in the Pilot's locker room, and a larger more complete kit is stored in the Personnel Equipment shop. These investigation kits shall be transported to the crash site by appropriate personnel under the direction of the Crash Site Manager. The Head, Aircraft Services Branch will ensure that this is accomplished.

Langley Research Center will support the Crash Site Manager enabling accomplishment of these responsibilities. This support includes security and safety personnel, photographers, aircraft maintenance personnel and vehicles and equipment.

Site Safing

The LaRC Safety and Mission Assurance Office (SMAO) will be asked to provide an Industrial Hygienist to assist with site safing and safety professionals to assist with the initial phases of the investigation if they are required. Aircraft Services Branch technicians will deactivate the ejection seats, batteries, and other aircraft equipment as required, and the respective crew chief and other maintenance technicians will be tasked with assisting in Site Preservation and the initial phases of the investigation.

In accordance with documents referenced in Paragraph B, LAFB personnel will not relinquish control of the crash site to the LaRC ASO or other official until it has been determined that the site is safe of potential hazards to crash site personnel. Beyond the dangers of fuel and other combustible materials are those presented by the burning or destruction of composite structures. Since these structures may contain carbon fibers, they may present a significant respiratory risk from minute free-floating fibers following an aircraft mishap. Of the current fleet of Langley aircraft, the Lancair, and the Cirrus have significant composite structures. LAFB Crash/Fire personnel are trained in handling composite structures. Burned or severely damaged composite structures will be encapsulated by the LAFB Crash/Fire personnel using applications to prevent any composite structures from posing respiratory hazards to crash site personnel. Determinations must be made by the LAFB environmental technicians that no risk is present. If a determination cannot be made, investigative personnel are required to wear protective respirators and any necessary protective clothing. It is the responsibility of the LaRC Industrial Hygienist to assist the Crash Site Manager in confirming the safety of a crash site. If doubt exists, investigative activity must not be attempted until all protective equipment is available.

If the site involves fatalities, the LAFB and LaRC Flight Surgeons must be notified immediately to assist in the removal and examination of remains. The LaRC Flight Surgeon is located in the NASA Clinic, Building 1149. Medical personnel are also responsible for assessing possible biohazards. If the accident occurs away from LAFB, the local coroner/medical examiner shall be notified for assistance.

LaRC aircraft currently do not contain hazardous materials, and therefore there is no requirement for a standing LaRC Hazardous Materials Team.

Photographers will operate at the discretion of the Crash Site Manager, and their use will be managed to prevent their exposure to unsafe situations.

After the above is accomplished and in the judgment of the Crash Site Manager, based on input from professional staff that all potential hazards have been removed, the site will be declared "safe."

Site Preservation

Between the completion of site safing and the start of the formal investigation, the site will be maintained and not disturbed. However, the following actions must be completed:

- Recovery of any classified data or equipment and delivery to LaRC Security for disposition.

- Recovery of perishable data (tapes, etc.) and delivery to ASO.

- Recovery of fuel and hydraulic fluid samples and delivery to ASO.

- Commencing complete photographic documentation of the crash site from all angles, as well as, close-ups of significant wreckage.

- Map the site, including significant items and ground damage locations.

- Obtain names, addresses, and telephone numbers of eyewitnesses.

Site preservation is under the supervision of the Crash Site Manager. Supporting personnel includes the LaRC Industrial Hygienist, SMAO safety personnel, and aircraft technicians. Site Preservation Team members who may be required to handle non-encapsulated broken or burned composite material must wear respirators and any protective clothing as prescribed by the on-scene Industrial Hygienist.

Mishap Investigation

Mishap investigation may overlap the site preservation stage with participation from the Interim Investigating Board. At some mutually agreed upon point, the Crash Site Manager will turn the site over to the Board Chairman who will continue with the data gathering, mapping, and photographing operations.

The permanent Mishap Investigating Board (MIB) will determine when to remove the wreckage and clean up the crash site. Removal and clean up is under the direction of the MIB for wreckage to be transported to a storage facility for further investigation. The Industrial Hygienist and other environmental professionals are responsible for ensuring compliance with safety and environmental requirements.

D. Mishap Reporting Checklist

Notification Information

If known, the following information must be provided when the accident is reported to LaRC management:

1. Aircraft type and side number
2. Personnel involved/injuries
3. Accident description
4. Accident site
5. Time of Accident

Emergency Call List

1. The LaRC Research Services Directorate (RSD), when receiving first notice of an accident on the LAFB airport, or in the immediate vicinity, will notify the LAFB Control Tower, (757) 764-2591, for crash phone activation, as required by LAFB 11-250, and will also notify the LaRC Flight Service Office, telephone (757) 864-3887.
2. The USAF tower controller, when receiving first notification of the accident, will notify the LaRC RSD, telephone (757) 864-7700, or the NASA Flight Service Office, telephone (757) 864-3887, during normal duty hours, or the LaRC West Area Fire Station, (757) 864-2222, after normal duty hours.
3. During normal duty hours, the LaRC Chief of Flight Operations or designee, will notify:

NOTE: All 4-digit extension numbers may be reached from off base by first dialing an 864 prefix.

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| a. LaRC West Area Fire Station | 911 on base
(757) 864-2222 off base |
| b. LaRC Aviation Safety Officer | 4-7816 |
| c. LaRC Safety,
and Mission Assurance Office | 4-3361 |
| d. LaRC Director, Research
Services Directorate | 4-7700 |
| e. LaRC Director or Deputy | 4-4111 |
| f. LaRC Public Affairs Officer | 4-6121 |
| g. LaRC Security and
Program Protection Branch | 4-5500 |

- h. NASA HQ Manager of Flight Safety (202) 358-0590
After normal duty hours or if no answer, ask the NASA HQ Security Office at (866) 230-6272 to contact the Manager of Flight Safety or Code Q Duty Official.
 - i. National Transportation Safety Board (NTSB)
Northeast Regional Office, Ashburn, VA (571) 223-3930
8 a.m. – 4:30 p.m. Monday-Friday
4. After normal duty hours, the LaRC West Area Fire Station will notify:
- a. LaRC Aviation Safety Officer
Leslie O. Kagey, Cellular (757) 291-8138
 - b. LaRC Chief Pilot
Richard J. Yasky, (757) 234-0300, Cellular (757) 593-3023
 - c. Emergency Preparedness Officer, Safety and Mission Assurance Office
Grant Watson, Cellular (757) 817-0408
 - d. LaRC Director, Research Services Directorate/Chief of Flight Operations
Howard J. Lewis, Cellular (757) 810-8482
 - e. LaRC Director or Deputy
Lesa B. Roe, Cellular (757) 871-4630

E. Responsibilities

1. Aviation Safety Officer
 - a. Represent the Center Director, and assume overall command and coordination of activities at the accident site (Crash Site Manager), until such time as exclusive control and security of the site is assumed by an investigative body official.
 - b. Advise the Chairperson, Executive Safety Council, regarding type and staffing of investigative activity.
 - c. Ensure that appropriate emergency medical personnel have been notified in the event of injury or death.
2. Chief of Flight Operations
 - a. Assure that all required USAF facilities have been notified and are responding.
 - b. Provide or arrange required transportation for personnel and equipment.
 - c. If the magnitude and effects of an accident warrant, request the Emergency Preparedness Officer to activate the Emergency Operations Center (LPR 1046.1, "NASA Langley Research Center Emergency Plan.")
 - d. Assure that the Center Director and Director for Research Services Directorate are kept informed of all pertinent information.

- e. Comply with initial reporting requirements of NPR 8621.1, "NASA Procedural Requirements for Mishap Reporting, Investigating, and Recordkeeping," regarding Headquarters notification and reporting to the NTSB.
- f. If appropriate, request support from the Aviation Safety Officer, Wallops Flight Facility, in the initial phases of the mishap investigation until such time as a permanent mishap investigation board is appointed.

Phone: (757) 824-1403

- 4. Director, Research Services Directorate
 - a. Report the accident immediately to the Center SMAO for entry into the IRIS system.
 - b. Through the Chairperson, Executive Safety Council, institute the appropriate investigative body processes, in accordance with NPR 8715.3 and NPR 8621.1.
- 5. Safety Manager/Emergency Preparedness Officer
 - a. Proceed to the accident site and assist the Aviation Safety Officer in control and coordination.
- 6. Security Officer
 - a. Coordinate with USAF and civil personnel to exercise control over the accident area.
- 7. Lead, Quality Assurance Office, and Head, Aircraft Services Branch.
 - a. Gather, and impound in a secure location, all historical, operational records, forms, work orders relative to the concerned aircraft, and release such material only to the Aviation Safety Officer or Chairman of the Interim Investigative Board or Mishap Investigation Board.
 - b. Furnish personnel and equipment as required by the Chief of Flight Operations to assist at the accident site in identifying and handling aircraft components, including special handling for pyrotechnics and composite materials.
- 8. Public Affairs Officer
 - a. Notify the LaRC Office of the Chief Counsel
 - b. Issue or approve all information releases to the news media
 - c. Coordinate with NASA Headquarters
- 9. Investigative Activity Chairperson
 - a. Upon appointment by the Chairperson, Executive Safety Council or higher NASA authority, assume investigative responsibility at the accident site for exclusive control of pertinent aircraft and aircrew documentation records and aircraft remains.

Any questions pertaining to this document may be addressed to the LaRC Aviation Safety Officer, Leslie O. Kagey (757) 864-7816.